(TMI Focus, Vol. XVII, No. 1, Winter 1995)

METAMUSIC® DEMONSTRATES ITS EFFECTIVENESS: A TMI LABORATORY REPORT

by E Holmes Atwater

METAMUSIC, especially the METAMUSIC ARTIST SERIES, occupies a uniquely versatile position in the hierarchy of Hemi-Sync[®] learning tools. It can assist listeners to relax, meditate, sleep, or access their creative and learning potential F. Holmes Atwater reports on an encounter with the power of METAMUSIC which was monitored by TMI's state-of-the-art brainmapping equipment.

EEG monitoring with the Neurosearch-24 combined with subjective individual reporting and direct observation in the laboratory at The Monroe Institute has demonstrated the effectiveness of the *METAMUSIC ARTIST SERIES* tapes. The Neurosearch-24 is an EEG monitoring and color topographic brainmapping system which provides multivariate real-time data acquisition and analysis. Laura Wulfhorst, an *INNER CIRCLE* member, volunteered as a subject and supported our ongoing research efforts by being monitored with the Neurosearch-24 while listening to *Sleeping through the Rain*, one of several titles available in the *ARTIST* series.

The *METAMUSIC ARTIST* tapes are all thirty-minute compositions embedded with Hemi-Sync tones to provide the listener with musically guided experiences. Each is a unique adventure for one who truly "hears the music." Some themes are story lines, while others evoke emotions and feel ings usually obscured by preoccupation with mundane, temporal states of consciousness.

Sleeping through the Rain segues between two states of consciousness. The delta/theta state of impressions, images, and feelings crossfades repeatedly into the delta state of sleep and back again. The transition between wakefulness and sleep occurs several times, concluding with delta sleep. Mark Certo, TMI audio engineer, describes the process: "Sleeping through the Rain varies from delta/theta to delta, exposing you initially to prolonged periods of delta/theta Hemi-Sync frequencies followed by shorter periods of delta Hemi-Sync frequencies. As the music continues, the length of the delta exposure extends in concert with the sleepy melody. As the sound of the rain eventually passes, sleep beckons the listener."

When Laura Wulfhorst arrived for her appointment, she commented that she was really "wired." All of her travel plans had been altered at the last minute, she had missed plane connections, and her luggage was lost. She didn't feel "anxious" or "worried" but she was certainly "hyper-activated." Once in the laboratory isolation booth, brainwave patterns mirrored her wide awake state of consciousness. Alpha and beta brain waves prevailed in both the left

and right hemispheres, exemplifying alertness. The Linear Channel Combination (LCC) electrode montage revealed the overall activity of both the left and right cerebral hemispheres

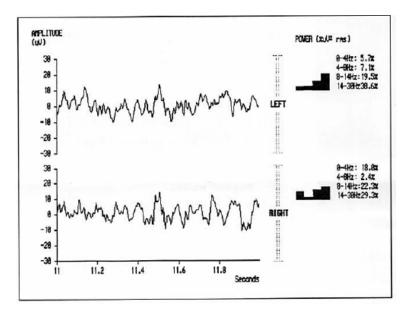


Figure 1

As Sleeping through the Rain entered the delta/theta sequence, Laura's brain waves showed evidence of entrainment to the delta/theta state of impressions, images, and feelings. This delta/theta activity quickly eclipsed the previous alpha and beta activity. Some interhemispheric synchrony was also evident.

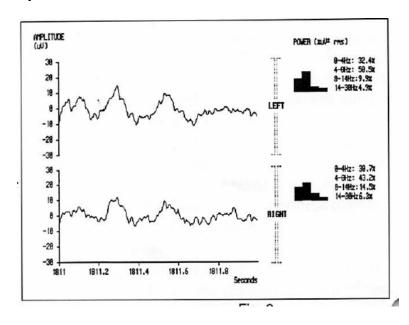


Figure 2

This Frequency Following Response (FFR) to the Hemi-Sync stimulus was later corroborated by Laura's subjective report. When the sound patterns segued into the sleep portion for the first time, Laura's brain waves did not initially reflect the delta environment. On the second crossfade into that milieu, she acquiesced to the *METAMUSIC* influence. Even though Laura did not remember falling asleep during those periods, the data indicated a predominance of high amplitude delta. Her respirations and light snoring also evidenced periods of restful sleep. The interhemispheric synchrony of delta waves during these portions of *Sleeping through the Rain* overshadowed the slightly asynchronous higher frequency activity (Fig. 3). Dream content during these segments could not be confirmed since she could not remember falling asleep.

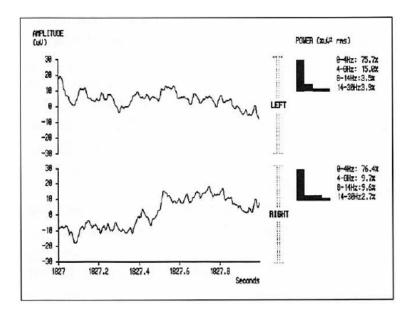


Figure 3

While being assisted from the experimental booth, Laura remarked that at times the music seemed to take hold of her and let her go, only to recapture her and release her once again. During an interview several days later, she described her feelings after *Sleeping through the Rain* as "put together" and "balanced." She had attained "a calmness" and felt "clear of mind." Overall, Laura characterized the experience as "pleasurable." She continued, "When not listening to the notes in the music my thoughts were in free association." Later she added, "I could hear myself snoring from time to time but never felt as if I was unconscious. I especially enjoyed the perception of the raindrops in the music." In conclusion Laura simply said, "I bought the tape. I had to have it!"

METAMUSIC creates a unique ambience for each listener. Vividness of imagination and cooperation with the theme intensify the experience. The same METAMUSIC selection can be enjoyed repeatedly, encountering different perceptual states each time according to one's focus. We offer our sincere appreciation to Laura Wulfhorst for her participation in this laboratory investigation.

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